The Health Center Oral Health Dashboard: What’s in It and How to Use It?

National Primary Oral Health Conference
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Session Overview

1) What is Quality Improvement?
2) Oral Health Dashboard Overview – What’s In It?
3) What did we learn when Health Centers tested the measures?
4) How do I use it?
Vision for Health Centers

Health Centers are **sustainable**, high performing healthcare providers with strong operations to ensure **high productivity** and **health improvements** (including oral health improvements) among their patients.
What is Quality?

- Quality in health care is a direct correlation between the level of improved health services and the desired health outcomes of individuals and populations. (IOM)
Quality Oral Health Program Characteristics

- Have a strong quality improvement program in place
- Have access to timely data that allows for rapid feedback and action on quality, productivity and costs

From NNOHA Characteristics of a Quality Oral Health/Dental Program, May 2011
What is Quality Improvement?

- QI consists of **systematic and continuous actions** that **lead to measurable improvement** in health care services and the health status of targeted patient groups. (HRSA)

- Quality improvement is a **formal approach** to the analysis of performance and **systematic efforts to improve it**. (NNOHA)
Quality Improvement and Health Centers

- Health Centers are required to have an ongoing Quality Improvement/Quality Assurance (QI/QA) program that includes clinical services and management...

- The QI/QA program must include:
  - Clinical director who supports the QI/QA program and provision of high quality patient care
  - Periodic assessment of the appropriateness of the utilization of services provided or proposed to be provided to individuals served by the health center
Quality Improvement Programs

Medical

Behavioral Health

Oral Health

Other

Interconnected and equally important in all aspects of the Health Center
Attention to Dental Metrics Expanding

- National Quality Measures Clearinghouse
- CHIPRA Pediatric Quality Measures Program
- Meaningful Use measures
- Dental Quality Alliance – Pediatric Starter Set
- Healthy People 2020
- National Committee on Quality Assurance HEDIS
- National Network for Oral Health Access
- National Oral Health Quality Improvement Committee
- National Quality Forum
- Oregon Dental Quality Metrics Workgroup
The Oral Health Dashboard

- The Oral Health Dashboard is a set of measures that is an optional tool for Health Centers to use as part of their quality improvement program to...
  - More effectively monitor and measure factors that affect quality
  - Establish baselines for key measures
  - Set targeted improvements for individual measures
  - Develop methods to improve performance
  - Track improvements over time
Dashboard Development

Panelists from:
- CMS
- NNOHA
- Institute for Oral Health

- Colorado and Washington CHCs Dental Directors & Leaders
- CHCs working on oral health metrics from around the country

- WA Dental Service Foundation
- Delta Dental of Colorado Foundation

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Balance

- Feasibility with future vision and potential requirements
- Standards to enable comparison with ability to tailor for individual health center situations
- Measures that offer synergy with national recommendations while being useful and applicable for individual health centers
- Measures useful to health centers with mature measurement programs and useful to health centers just starting measurement programs
### CHC Population Health

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### Fiscal & Operational Sustainability

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Population Health Metrics

New Caries Rate

Treatment Plan Completion

Clinical Interventions
1. Risk Assessment
2. Topical Fluoride
3. Sealants
4. Sealants
5. Self-Management Goal Setting and Review

Dental/Medical Integration
- Risk Assessment
- Self-Management Goals
Test Phase Overview

- **Process:**
  - 9 health centers tested a sub-set of the measures: 5 in Colorado, 4 in Washington
  - 4 month test phase
  - Tested 2-5 measures

- **Test phase goals were to:**
  - Determine the mechanics to get the data out of the system
  - Operational processes necessary to track data
  - The usefulness, applicability of the data to CHCs as part of their QI program
Test Phase: Successes

- Increased attention and support from leadership
- Collaboration between medical, dental and information systems teams
- Alignment of measures with organizational strategic plans and existing systems
- Organizational support for medical and dental integration
- Increased overall support for obtaining dental quality measures increased
Test Phase: Challenges

- Developing and educating teams on the process
- Unfamiliar with the use of diagnostic coding and accurate diagnostic coding
- Providers inability to use or failure to input dummy codes
- Time commitment for report building and writing
- Changing workflow habits
- Providers and staff reporting data differently
- Lack of connection between medical & dental providers
- Inability to “talk” between electronic record and management systems
Community Health Center
Dental Dashboard Measures

This resource is an optional tool for individual Community Health Centers (CHCs) to use to more effectively monitor and measure quality and drive performance within their centers. The measures that make up the dashboard aim to drive operational, financial, and clinical improvements, and can be used as an integral part of a health center’s quality improvement program.

**CHC Population Health**
- Oral Evaluation and/or Risk Assessment of all Primary Care Patients
  - % of all health center patients that have an oral evaluation and/or risk assessment performed by a medical provider
- Risk Assessment of all Dental Patients
  - % of all dental patients that have an oral health risk assessment performed
- Topical Fluoride
  - % of pediatric patients (dental and medical) who receive topical fluoride application
- Sealants (6-9 year olds)
  - % of 6-9 year old children who were seen by a practitioner who receive a sealant on one or more first permanent molar tooth
- Sealants (13-15 year olds)
  - % of 13-15 year old children who were seen by a practitioner who receive a sealant on one or more second permanent molar teeth
- Self-Management Goal Setting & Review
  - % of dental patients that have oral health self-management goals set and reviewed by their dental provider

**Fiscal & Operational Sustainability**
- Self-Management Goal Sharing
  - % of health center patients that have oral health self-management goals reviewed by their medical provider
- Treatment Plan Completion
  - % of dental patients that have Phase I treatment plan completed within 6 months
- Untreated Caries Rate
  - % of established dental patients that have new caries at recall

**Patient Satisfaction**
- Recommendation to Family & Friends
  - % of patients that would recommend dental clinic to family and friends
The Oral Health Dashboard: Key Changes

- **New Measures**
  - Oral evaluation of all primary care patients

- **Revised Measures**
  - Topical fluoride: Dental patients → Pediatric dental and medical patients
  - Sealants: 10-14 year olds → 13-15 year olds
  - Caries Rate at Recall: New Caries → Untreated Caries Rate
  - RVUs per Encounter → Charges per Encounter
High-Level Next Steps

- Develop plan for additional testing
- Finalize the User’s Guide
- Share via the Dental Director Learning Networks
- Continue to make improvements based on feedback
- Facilitate technical assistance with individual CHCs
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Mission

• The mission of Neighborcare Health is to provide comprehensive healthcare to families and individuals who have difficulty accessing care; respond with sensitivity to the needs of our culturally diverse patients; and advocate and work with others to improve the overall health status of the communities we serve.

• Our purpose is to improve health by engaging, educating and empowering people in the communities we serve.

• Our Ultimate Goal is 100% Access, Zero Health Disparities.
Dental Sites

- 45th St. Medical & Dental Clinic
- Central Area Dental Clinic
- Georgetown Family Dental Clinic
- Rainier Beach Medical & Dental Clinic
- High Point Medical & Dental Clinic
9 Medical Clinics

Medical Visits in 2013

• Primary Care/OB  112,579
• MSS  1,872
• Mental Health  7,027
• Total Medical Program  121,478

Patient Centered Medical Home Recognition - Level 3
Dental

5 dental clinics
• 51,000 visits in 2013

Team:
• 12 full time dentists & 4 part time dentists
• 3 full time RDH & 3 part time RDH
• 6 Expanded Function Dental Assistants
History of QI:

- 2002: Change in practice and vision of how we wanted to address quality and best practices
  - Developed internal leaders to lead change work around work flows.
- Led to development of Improvement team
Where we are now: QI Journey

• Creating a vision for our organization
• Director of Improvement
  – Continuous Improvement manager
  – Quality manager
  – Health records manager
• QI Committee
• Peer Review committee
• CAMBRA team
Where we are now: QI Journey

• What are we trying to accomplish?
• How will we know that the change is an improvement?
• What change can we make that will result in an improvement?
Involvement in Dashboard

• Close relationship with Washington Dental Services Foundation
• Leadership that supports innovation and change!
• Currently use a Dashboard for operation metrics
  – Opportunity for improvements?
• Other QI projects that overlapped
**Involvement in Dashboard**

- **Metric Selection**: New caries & Self Management Goals
  - Originally part of separate QI project
  - Sealants: interested in seeing if this was a possibility given pediatric population
  - Recalls: had used this previously and wanted to re-examine for usability/share with others

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**CHC POPULATION HEALTH**

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**FISCAL & OPERATIONAL SUSTAINABILITY**

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**PATIENT SATISFACTION**

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- **Recommendation to Family & Friends**: % of patients that would recommend dental clinic to family and friends
Planning Process: New Caries

- **History:**
  - Early Childhood Caries Project
  - Led to process level changes
  - Overlap of timeline
  - PDSA’s!

- **Project Team:** CAMBRA committee
  - Clinicians, managers, Continuous Improvement
  - Collaboration with IT
Electronic Systems

• Medical EMR: Nextgen 7.8.5 (upgrade to 8.3.8 in September)
• Dental EDR: QSI 4.3 (upgrade to 5.0)
• Interoperable EMR-EDR: Limited functionality
Metric Evaluation

• % new caries at recall
  – Numerator: # of patients with D0120 with new caries
  – Denominator: # of patients with D0120

• Rationale:
  – Excludes 0140 and 0150 patients
  – Focuses on patients in system of care
  – Can patients access treatment in a timely manner?
  – Are preventive efforts working?
EDR Process

• Set up electronic coding/notes
• Use of “dummy” code and smart note
• Training
EDR Process
Data and Reporting

• Data Assessment: What does the data tell us?
  – Initial: project committee
    • Several Ah-ha moments!

  – Present: dental leadership team, CAMBRA committee
    • Baseline
Challenges

• Changing habits
• Electronic Limitations
• Resources
  – IT
  – Time
  – Delays from work requests
• Usefulness of metrics
  – Example: Sealants metric
Lessons Learned

- Checking reports - verify accuracy
  - Audit your process
- Build in convenience for providers
- IT Support is key
  - Leadership from executive team also critical
- Use proven methods → IHI resources
- Learn from both your successes and “failures”
Lessons Learned

• Start small
  – One provider, one team, one clinic...
  – Choose an “easy” metric
    • What do you value? What can you pull? What are you interested in?

• Value of metrics for others
  – What do you do with them?
  – Regular review and evaluation

• Ask the “Why”?*
  – Watch: Simon Sinek: Start with the Why
The future:

• Monitor our caries metric (and others)
  – Is this a good metric?
  – Obtain baseline
  – What change can we make that will result in an improvement?

• Process change vs. Project
  – Long term success
  – Ownership
Contact:

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Caries at Recall

AN NGUYEN, DDS, MPH
VICE-PRESIDENT OF DENTAL SERVICES
Our Mission

To be the medical and dental care provider of choice for low income and other underserved people in south Boulder, Broomfield and west Adams counties. We believe that health care shall be culturally appropriate and prevention focused.
**Clinica**
- Founded 1977 in Lafayette, CO
- >40,000 Active Patients
  - Medical
  - Dental
  - Behavioral Health
  - Pharmacy
- 49% uninsured
- 98% <200% Poverty
- 42% Non-English Preference
- 5 Clinic Sites
- 500 Employees (85 Providers)

**Dental**
- Established 2002
- 13 Providers
  - General Dentistry
  - Pediatric Dentistry
  - Integrated Dental Hygiene
- 2 Clinic Locations
- 11,000 Patients
Our Quality Improvement Journey

- **1998**: Joined IHI’s Chronic Care Collaborative
- **2000**: Delivery System Redesign
- **2001-2004**: Planned Care Approach for QI

What are we trying to accomplish?

How will we know that a change is an improvement?

What change can we make that will result in improvement?
Our Quality Improvement Journey

- 2004-Present: Spread & Sustain Innovations

Innovations

A Better Mousetrap

Health care is a rapidly changing industry. Not just in the areas of research and technology, but also in how health care is provided to patients.

Clinica is constantly searching for better ways to help our patients get healthy and stay that way. We are looking for ways to use the data we collect about patients to make better decisions about their care. We offer patients a variety of ways to contact their providers. We are proactive about health care. Instead of waiting until patients are sick because their chronic disease is out of control, we work with them to make a health care plan. We have mental health therapists who are full-time members of our staff because how someone feels mentally impacts how they feel physically. We offer patients same-day appointments so that they can get the care they need when they need it. We don’t just provide health care to our patients; we work with them to improve their health. Our patients are our partners, and we help coordinate all their...
Context for Dental Quality Improvement

- National Interest in Outcomes-Based Health Care
  - Meaningful Use
  - Affordable Care Act

- Organizational History
  - National Recognition
  - Integrated Quality Improvement: Peer Review, Clinical Advisory Group

- Organizational Leadership
  - Integrated Leadership Structure
  - Department of Strategic Support
Opportunity

- **Dental Department Leadership & Growth (2009 – Present)**
  - New Leadership
  - New, Growing Team
- **Operational Foundations**
  - No Show Rate
  - Visits per Day
  - % of Filled Slots
- **Clinical Momentum**
  - Organizational Strategic Focus on Clinical Outcomes
- **High Performing Health Centers: Dental Dashboard Project**
Dental Dashboard Project

**CHC POPULATION HEALTH**

- **New Caries Rate**
  - % of established dental patients that have new caries at recall

- **Topical Fluoride**
  - % of dental patients who received topical fluoride application

- **Self-Management Goal Setting & Review**
  - % of dental patients that have oral health self-management goals set and reviewed

- **Treatment Plan Completion**
  - % of patients that have Phase 1 treatment plan completed within 6 months

- **Sealants (6-9 year olds)**
  - % of 6-9 year old children who were seen by a practitioner who received a sealant on one or more first permanent molar tooth.

- **Self-Management Goal Sharing**
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Report Development

- Collaborative Project Team
  - Dental Team: VP Dental Services, Dental Operations Director
  - Business Intelligence Team (“Nerdarium”): VP Strategic Support, Director of BI, BI Project Manager

- Biweekly Meetings

- Project Management
  - Stakeholders
  - Processes
  - Testing & Training
  - Timelines
Metric Definitions

**New Caries Rate** = % of established patients that have new caries at recall

- *How will we collect this data?*
  - NextGen Electronic Practice Management (EPM)
  - QSI, Version 4.3 Electronic Dental Record (EDR)

- *What data do we have access to?*
  - Billing Codes
  - EDR Data Tables
## Metric Definitions

**At Recall**

**New Caries Rate** = % of established patients that have new caries at recall

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<th>Operationalization</th>
<th>Rationale</th>
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| Established Patient  | Patient who has had a completed comprehensive exam (D0150) or oral evaluation for patient under 3YO (D0145) with a dental visit (of any type) within the past 18 months.                                      | • Excludes patients who only receive episodic, acute care.  
• Includes only “active” patients.                                                                                           |
| New Caries           | • Eliminated “New”  
• Entry/completion of a ICD-9 caries diagnostic code when caries is identified during the visit.                                                                                                           | • Simplifies metric/avoids “dummy” codes.  
• Leverages organizational work on coding.                                                                               |
| Recall               | Completion of a periodic exam (D0120) or return D0145 (excludes first D0145).                                                                                                                                     | Includes visits where caries detection is standard practice.                                  |

Numerator: **Active Pts with D0120 or D0145 AND Caries Dx Code**  
Denominator: **Pts with D0120 or Return D0145**
Data Entry

Report will search for a combination of two codes entered simultaneously:
(1) a CDT/procedure code denoting a recall exam
(2) a diagnosis code denoting caries.
Report Implementation

1. Report Validation
   Workflow Determination
   Small Scale PDSA

2. Team Training
   Diagnosis Coding
   Clinical Documentation

Improvement

Data

Spread

Implementation of Change

Wide-Scale Tests of Change

Follow-up Tests

Very Small Scale Test

Clinica Family Health Services
Implications for Quality Improvement

Goal: By end of 2014, establish baseline measure for Caries at Recall Rate.

• INSERT GRAPH HERE!
Implications for Quality Improvement

Goal: By end of 2016, reduce Caries at Recall Rate by 10%.

- Determine where to intervene – what impacts outcome most?
- Incorporate into routine dashboard review.
Other Indicators...

**CHC POPULATION HEALTH**

- **Caries at Recall Rate**
  % of established patients that have new caries at recall

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Challenges & Lessons Learned

- **Potential Challenges**
  - “EDRs are *(sometimes)* dumb!”
  - Limitations of Dental Billing Codes
  - Change Management
  - Internal Resources

- **Lessons Learned**
  - Look for alignment. Get leadership support.
  - Integrate systems and processes.
  - Start small, but start!
  - Use QI tools that work.
  - What gets measured is what gets worked on.
A Roadmap

- What are you already measuring?
- Is what you’re measuring useful?
- Do they drive change?
- Start small with a few measures, use them to drive quality, and add additional later.
Contact

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